

CLAIMS

We claim:

1. A user terminal of a channel-based network, the user terminal comprising:

a memory circuit that is configured to store a channel table, the channel table including a plurality of channel numbers, each channel number having an associated Internet address and an associated Internet site name;

an input device for entering a selected channel number; and

means for reading the Internet address associated with the selected channel number from the memory circuit, and for connecting the user terminal to a selected Internet site that is addressed by the Internet address associated with the selected channel number such that communications between the user terminal and the selected Internet site are transmitted only via the Internet.

2. The user terminal according to Claim 1, wherein the memory circuit comprises a synchronous dynamic random access memory (SDRAM).

3. The user terminal according to Claim 1, wherein the memory circuit comprises a flash memory.

4. The user terminal according to Claim 3, wherein the flash memory includes a first section for storing a first channel table and a second section for storing a second channel table.

5. The user terminal according to Claim 3, wherein each Internet address stored in the channel table includes an associated parental guidance code, and wherein processor includes means for preventing the transmission of Internet addresses that are associated with parental guidance codes having a predetermined value.

6. The user terminal according to Claim 3, wherein each Internet site name stored in the channel table includes an associated favorite site code, and wherein processor includes means for listing on a display apparatus a group of Internet site names that are associated with favorite site codes having a predetermined value.

7. The user terminal according to Claim 1, further comprising a display apparatus for displaying the plurality of channel numbers and associated Internet site names that are stored in the memory circuit.

8. The user terminal according to Claim 7, where the display apparatus comprises a television.

9. The user terminal according to Claim 1, wherein said means for reading comprises:

communication circuitry configured to transmit signals to and receive signals from the Internet;

a control unit for receiving the selected channel number from the input device; and

a processor configured to read the Internet address associated with the selected channel number from the memory

circuit, and to transmit the associated Internet address via the communication circuitry onto the Internet.

10. The user terminal according to Claim 9, wherein the control unit comprises a system controller and a micro-controller connected to the system controller via an interface port.

11. The user terminal according to Claim 10, wherein the control unit further comprises an infra-red detector connected to the micro-controller, and wherein the input device comprises means for transmitting infra-red signals to the infra-red detector.

12. The user terminal according to Claim 11, wherein the input device comprises a numeric keypad, one or more dedicated function keys and a joystick.

13. The user terminal according to Claim 12, wherein the input device is implemented in a remote control unit.

14. The user terminal according to Claim 12, wherein the input device includes a QWERTY keyboard.

15. The user terminal according to Claim 8, further comprising a smart card socket and an interrupt switch connected between the system controller and the smart card socket.

16. The user terminal according to Claim 1, further comprising an asset manager memory for storing a serial

number of the user terminal, and for storing a version number of the channel table stored by the memory circuit.

17. The user terminal according to Claim 1, wherein the user terminal comprises a set-top box connected to a television.

18. The user terminal according to Claim 1, wherein the user terminal comprises a personal computer.

19. The user terminal according to Claim 1, wherein the user terminal comprises a cellular telephone.

20. The user terminal according to Claim 1, wherein the user terminal comprises a personal digital assistant.

21. A user terminal of a channel-based network that is connected to the Internet, the user terminal comprising:

- a non-volatile memory circuit for storing a first channel table, the first channel table including a plurality of channel numbers, each channel number having an associated Internet address and an associated Internet site name;

- a volatile memory circuit;

- an input device;

- a control unit for receiving a selected channel number entered by a user through the input device; and

- means for selectively copying the first channel table from the non-volatile memory circuit to the volatile memory circuit, for reading the Internet address associated with the selected channel number from the volatile memory circuit, and for transmitting the

associated Internet address via the communication circuitry directly onto the Internet, thereby connecting the user terminal to a selected Internet site that is addressed by the associated Internet address such that communications between the user terminal and the selected Internet site are transmitted directly over the Internet.

22. The user terminal according to Claim 21, wherein the non-volatile memory circuit is a flash memory, and wherein the volatile memory circuit is a synchronous dynamic random access memory (SDRAM).

23. The user terminal according to Claim 21, further comprising:

communication circuitry for downloading a second channel table from the Internet;

means for detecting one of a resident user and a guest user; and

means for storing the downloaded second channel table in the non-volatile memory circuit when the resident user is detected, and for storing the downloaded second channel table in the volatile memory when the guest user is detected,

wherein, when the resident user is detected, the means for selectively copying copies the second channel table into the volatile memory after it is stored in the non-volatile memory circuit.

24. The user terminal according to Claim 23, wherein the means for detecting comprises a system controller, a smart card socket, and an interrupt switch connected between the smart card socket and the system controller.

25. The user terminal according to Claim 24, further comprising means for erasing said volatile memory in response to an interrupt control signal transmitted from the interrupt switch.

26. A user terminal of a channel-based network that is connected to the Internet, the channel-based network including a system server and an Internet site having Internet address, the user terminal comprising:

means for downloading a channel table from the system server via the Internet, the channel table including a plurality of channel numbers associated Internet addresses and associated Internet site names, wherein a first channel number is associated with the Internet address of the Internet site and an Internet name that is descriptive of the Internet site; and

means for transmitting the Internet address from the downloaded channel table directly onto the Internet when the first channel number is entered by the user, thereby connecting the user terminal to the Internet site such that communications between the user terminal and the selected Internet site are transmitted directly over the Internet.

27. The user terminal according to Claim 26, further comprising means for transmitting user information from a user's smart card and terminal information from an asset manager memory to the system server via the Internet, and for receiving an authorization code from the system server indicating that the user is authorized to operate the user terminal.

28. The user terminal according to Claim 27, further comprising:

a non-volatile memory circuit;

a volatile memory circuit;

means detecting whether an authorized user is a resident user or a guest user; and

means for storing the downloaded channel table in the non-volatile memory circuit when the user is a resident user, and for storing the downloaded channel table in the volatile memory when the user is a guest user.

29. A method for operating a user terminal in a channel-based network, the user terminal including a non-volatile memory circuit and a volatile memory circuit, the non-volatile memory circuit being configured to store a user channel table, the user channel table including a plurality of channel numbers, associated Internet addresses and associated Internet site names, wherein the method comprises:

detecting the presence of a user;

determining whether the user is a resident user or a guest user;

downloading the user channel table into the non-volatile memory from a system server via the Internet; and

copying a user channel table from the non-volatile memory to the volatile memory only when the user is determined to be a resident user.

30. The method according to Claim 29, wherein the step of detecting comprises receiving an interrupt signal from an

interrupt switch that is connected to a smart card socket indicating the connection of a smart card to the smart card socket.

31. The method according to Claim 29, further comprising the step of erasing the volatile memory after the step of detecting and before the step of determining.

32. A method for operating a user terminal in a channel-based network including a system server, the system server including a channel table database storing a master channel table, the user terminal including a non-volatile memory circuit storing a user channel table, wherein each of the master channel table and the user channel table include a plurality of channel numbers, associated Internet addresses and associated Internet site names, wherein the method comprises:

determining whether the master channel table is different from the user channel table;

downloading the master channel table from the system server when the master channel table is different from the user channel table;

storing the master channel table in the non-volatile memory such that the master channel table replaces the user channel table.

33. The method according to Claim 32, wherein the step of determining comprises:

transmitting a version number associated with the user channel table to the system server; and

receiving an update available signal from the system server indicating that the user channel table is different from the master channel table.

34. The method according to Claim 32, wherein the step of downloading comprises:

transmitting a request to the system server; and
storing the master channel table transmitted from the system server in a volatile memory.